Sea-Tac Airport Recycling Program



Recycling at the Seattle-Tacoma International Airport is now as standard as trash collecting. From bottles and cans to coffee grounds, this airport knows how to reduce its environmental footprint and save money. In 2006, the airport is projected to save more than \$150,000 in diverted disposal costs. Continually enhancing its program, Sea-Tac's recycling tonnage is on the rise.

Facts-at-a-Glance

- Sea-Tac offers recycling in airport offices, terminals, and concession areas for tenants and airline passengers.
- Sea-Tac recycles:
 - Beverage containers
 - Mixed paper
 - Cardboard
 - Cooking oil
 - Coffee grounds
 - Batteries
 - Printer/copier cartridges
 - Metals
 - Wood
 - Pallets
 - Plastic films

Grecycling isn't only good for the environment; it's good for our own bank account. This is an example of how doing the right thing is good business.

Patricia Davis
 Port of Seattle Commission
 President and Chair



Program Overview

The Seattle-Tacoma International Airport (Sea-Tac) currently ranks as the 17th busiest passenger airport in the United States. In 2005, Sea-Tac served more than 29 million passengers, completed 340,000 aircraft operations, and moved more than 330,000 metric tons of air cargo.



Photo courtesy of Sea-Tac Airpor

In 1993, the first year of its recycling program, Sea-Tac collected about 112 tons of recyclables. In 2001, with the implementation of increased security, passengers began to spend more time in the airport and create more waste. To address this additional waste, Sea-Tac hired a consulting firm to conduct an assessment of the airport's recycling program. With assistance from a National Association for PET Container Resources (NAPCOR) grant and the consultant, Sea-Tac revamped its program, hired recycling coordinators, added PET bottle collection, and redesigned recycling signs. Overall, recycling tonnage increased by 900 percent between 2001 and 2005. The airport collects items such as coffee grounds, mixed paper, and beverage containers—a total of 1,038 tons of recyclables in 2005. Today, Sea-Tac recycles as much in one month as it used to collect in one year!

Nuts and Bolts

Sea-Tac provides recycling opportunities in the terminals, retail stores, maintenance buildings, and airport offices, as well as food concessions, taxi stands, and garages for certain airlines. The original program collected only bottles and cans in the terminals. After the 2001 waste assessment, Sea-Tac expanded the program and redesigned recycling bin signage to catch passengers attention. The new bin signage increased public recycling tonnage by 40 percent. As the airport expanded its program, it purchased many different styles of recycling bins. Some bins provide advertising space; selling ad space helps subsidize program costs.

After expanding bottle and can collection, the airport added office paper collection by placing more than 1,000 desk-side bins by employees' workstations. Based on the success of this initial effort, bins were added to airline ticket and maintenance offices. The recycling program now also includes beverage containers, printer cartridges, batteries, coffee grounds, and cardboard from office locations.

Sea-Tac then began to collect coffee grounds from the 60 airport shops that sell coffee. Using special bins to capture the grounds, the 12 tons of coffee generated each month are mixed with yard waste and sent to a composter. The compost is then used in Sea-Tac's landscaping.

The Bottom Line

- The Seattle-Tacoma Airport saves more than \$150,000 in diverted disposal costs a year.
- Four years after 2001's revamped recycling system, the airport had increased recycling tonnage by 900 percent.
- Recycling at the airport increases its positive community image. Seattle appreciates the airport's green efforts.

Fun Facts

- More than 60 coffee shops at the airport recycle 12 tons of coffee grounds each month.
- Selling ad space on recycling bins recovers recycling bin costs.
- As much as 500 pounds of unsold, prepackaged food from airport shops and restaurants are donated to local food banks each week.

Sea-Tac's latest collection effort involves cooking oil. The organic oil is collected from airport restaurants and snack bars and sold to private companies that use it to produce biodiesel.

With the completion of a new terminal and food court in 2005, the new stores and restaurants were brought into the airport's recycling program. To create a



Photo courtesy of Sea-Tac Airpor

financial incentive for retailers to recycle, Sea-Tac installed an electronic trash monitoring system that only charges retailers for what they toss in the trash compactor; the recycling compactor is free.

In August 2006, five stores and restaurants joined another waste-reducing project called the Sea-Tac Food Donation Program. These shops now give food banks the unsold prepackaged food that they previously threw away. As much as 500 pounds of unopened salads, sandwiches, and pastries are donated weekly, and the program is still expanding!

Challenges and Solutions

- Challenge: Originally, public participation in the recycling program was low.
 - **Solution:** Redesign the recycling bin signs to be clear and concise, and include graphics so that international passengers also can participate.
- Challenge: Waste and recycling tonnage was hard to track with so many waste streams and multiple haulers.
 - **Solution**: Require waste and recycling reports from haulers and publish recycling data to keep staff involved and energized.
- Challenge: Collecting and transporting cooking oil was difficult.
 - **Solution:** Use specially designed containers that wheel under the fry pits and have a sealed top so oil cannot spill out.

Reasons for Success

- Providing support from top management.
- Using recycling consultants.
- Requiring ongoing training/education of employees and tenants.
- Reporting results to participants to keep them motivated.
- Involving and cooperating with the maintenance staff.
- Providing financial incentive for recycling to retailers by installing an electronic trash monitoring system.
- Presenting recycling opportunities in offices, food courts, and terminals to create a broad recycling ethic.



United States
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Office of Solid Waste (5306P) EPA530-F-06-026 December 2006 www.epa.gov/recycleonthego

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